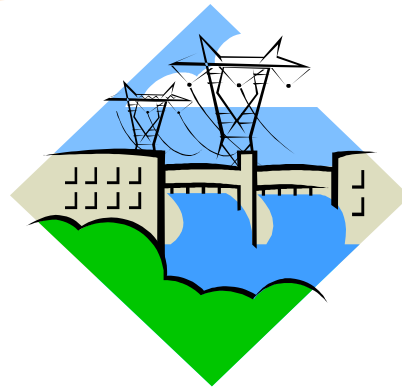
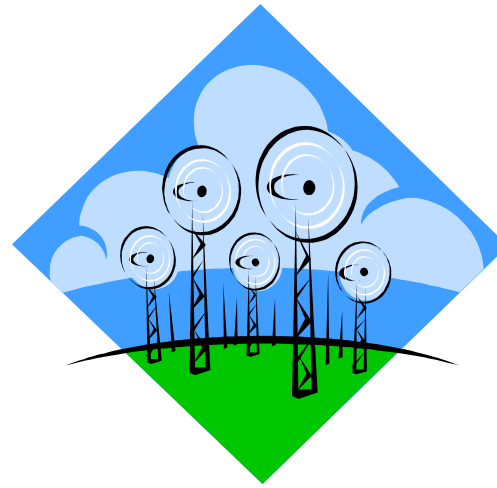


# Renewable Portfolio Standard Implementation in Maryland....



October 4, 2004  
Commissioner Ronald A. Guns  
Public Service Commission of Maryland

# Renewable Portfolio Standard

- Enacted July 1, 2004
- A "Renewable Energy Portfolio Standard" or "Standard" is defined as the percentage of electricity sales at retail in the state that is to be derived from statutory-defined renewable sources.
- The RPS legislation requires each electricity supplier to demonstrate, beginning in 2006, that the percentage of renewable energy in the electric power supplier's electric energy portfolio for the preceding calendar year was at least as great as the required minimum percentages set forth in the legislation.
- Commission must adopt regulations by July 1, 2005

**Table 1**  
**Maryland RPS**  
**Summary of Eligible**  
**Technologies**

Tier 1	Tier 2
<ul style="list-style-type: none"> <li>• Solar</li> <li>• Wind;</li> <li>• Qualifying biomass</li> <li>• Methane from the anaerobic decomposition of organic materials in a landfill or wastewater treatment plant</li> <li>• Geothermal</li> <li>• Ocean, including energy from waves, tides, currents, and thermal differences</li> <li>• A fuel cell that produces electricity from a Tier 1 renewable source</li> <li>• Small-scale hydro (LT 30MW)</li> </ul>	<ul style="list-style-type: none"> <li>• Hydroelectric power other than pump storage generation</li> <li>• Incineration of poultry litter</li> <li>• Waste-to-energy</li> </ul>

<b>Table 2</b> <b>RPS Schedule</b>		
<b>Year</b>	<b>Tier 1</b>	<b>Tier 2</b>
2006	1.0%	2.5%
2007	1.0%	2.5%
2008	2.0%	2.5%
2009	2.0%	2.5%
2010	3.0%	2.5%
2011	3.0%	2.5%
2012	4.0%	2.5%
2013	4.0%	2.5%
2014	5.0%	2.5%
2015	5.0%	2.5%
2016	6.0%	2.5%
2017	6.0%	2.5%
2018	7.0%	2.5%
2019	7.5%	0.0%

# Key Provisions

- Renewable Energy Credits
  - REC = attributes of 1 MWh of Generation
  - REC creation is retroactive to January 1, 2004
- Establish a Market-based trading system
- The Trading System must include a registry containing pertinent and current information about REC

# Other Requirements

- Compliance Fees--
  - 2.0 cents/kWh for shortfall for Tier 1
  - 1.5 cents/kWh for shortfall for Tier 2
- Special Schedule of Compliance Fees for Industrial Process Customers
- Waiver of fees for economic hardship for industrial customers
- Funds paid into the Maryland Renewable Energy Fund

# Challenges

- Establish Mechanism to Create RECs
- Establish Mechanism to Trade RECs
- Identifying industrial process customers
- Processing hardship waiver applications

# More Challenges

- PSC does not regulate generation
  - PJM Transactions
    - Data accumulated by PJM necessary to monitor REC Creation
    - PJM is a FERC jurisdictional entity
  - On-Site Generation
    - May not be metered
    - Identifying sites outside Maryland
  - PJM Imports
    - How measured
    - Deliverability
- Resources to Implement Program



# PSC Case 9019

- Staff Identified 11 Threshold Policy Issues
- 1 Threshold Administrative Issue
- Comments due October 15, 2004
- Promulgate Regulations by March 2005
- Visit Website <http://www.psc.state.md.us/> under Search Case Files to find documents

# Threshold Policy Issues

1. Should generators be required to be pre-approved by the Commission before REC creation to (1) verify eligibility as a Tier 1 or Tier 2 resource and/or (2) bind the generator to the terms of the program?
2. Should RECs be created through a single uniform process? If so, what should this process be? If not, how should this matter be handled?
3. For renewable energy generated outside the PJM control area, when is the credit created and what entity is entitled to the credit, e.g., the generator or the entity that delivers the electricity into PJM?
4. How should the Commission account for renewable energy credits that will have been created, transferred and/or accumulated prior to the promulgation of regulations (“retroactive credits”)? What safeguards are needed to ensure that these credits are properly assigned and not accounted for more than once?
5. How should a market-based trading system be implemented?

# Threshold Policy Issues

6. What should be the relationship of the registry to the trading system?
7. What are the data and confidentiality concerns of stakeholders?
8. How should the Commission capture price data for inclusion in the registry?
9. What “pertinent” and “current” information should be included in the registry? Must this information be based on individual transactions or should the information be aggregated in some fashion? Must “current” status include real time information or can there be a lag between REC creation/transactions and reporting the information to the registry?
10. Will market monitoring be necessary as part of the market-based trading system?
11. What is an adjacent control area for purposes of the RPS?

# Threshold Administrative Issue

- Commission needs to determine which party or parties will create and maintain the system for REC creation and for credit trading and registration.
- Options
  - Commission Resources
  - Contractor
  - PJM